

Surveillance for Guillain-Barré Syndrome in Oregon

Shiferaw B, Steingraber K, Chapin W, Finnegan C, Kennedy M, Cieslak P and the EIP FoodNet Working Group

Background: Guillain-Barré syndrome (GBS) is an acute demyelinating condition that may complicate *Campylobacter* or upper respiratory infections. GBS is not reportable in Oregon, and its incidence is not known in that state. We sought to determine the burden and the proportion of GBS cases attributable to *Campylobacter* infection in Oregon.

Methods: *Campylobacter* infections reported in Oregon during 1997 were reviewed. Oregon 1997 hospital discharge data (HDD) were queried for ICD-9 code 357.0. Hospitals with cases so identified were asked to review their own records for additional cases. Duplicates due to repeat admissions were removed. Data were abstracted from discharge summaries and laboratory records. Cases were classified as definite, probable, possible or non-cases according to published criteria.

Results: Eighty-two cases of GBS were identified through the initial HDD query, including 24 cases identified by hospitals. Four medical charts were unobtainable. Twenty-two (28%) of the remaining 78 were classified as definite cases, 12 (15%) were probable cases, 10 (13%) were possible cases, and 34 (44%) were non-cases. Treatment modalities included plasmapheresis (32%), and IVIG (54%). The majority of the patients were discharged home (64%), 32% were discharged to extended-care facilities, and one person died. The mean number of days in the intensive care unit was 13 days. The statewide incidence of definite, probable, and possible cases was 1.4/100,000. Persons >65 years of age older had a higher incidence than younger persons (2.1 vs 1.3/100,000). Men had higher rates than women (1.6 vs 1.2). Of the 44 definite, probable or possible cases, 8 (18%) reported preceding gastrointestinal illness; 3 (7%) had confirmed *Campylobacter* infection. Seven-hundred thirty-seven cases of laboratory-confirmed campylobacteriosis were reported in Oregon during 1997.

Conclusion: GBS caused 1 death and substantial morbidity in Oregon in 1997. Diagnosed *Campylobacter* infection was associated with at least 7% of GBS. About 0.4% of laboratory-confirmed *Campylobacter* infections were complicated by GBS. Efforts to prevent campylobacteriosis are likely to result in a decreased incidence of this serious complication.

Suggested citation:

Shiferaw B, Steingraber K, Chapin W, Finnegan C, Kennedy M, Cieslak P and the EIP FoodNet Working Group. Surveillance for Guillain-Barré Syndrome in Oregon. International Conference on Emerging Infectious Diseases. Atlanta, GA, March 2002.